| The demand must be filed directly with the competent International Preliminary Examining Authority or, if two or more Authorities are competent, |
|--|
| with the one chosen by the applicant. The full name or two-letter code of that Authority may be indicated by the applicant on the line below:    |

IPEA/\_JP

# **PCT**

CHAPTER II

## **DEMAND**

under Article 31 of the Patent Cooperation Treaty:

The undersigned requests that the international application specified below be the subject of international preliminary examination according to the Patent Cooperation Treaty and hereby elects all eligible States (except where otherwise indicated).

| For International Preliminary Examining Authority use only   |   |   |   |           |
|--|---|---|---|-----------|
| Identification of IPEA   | Date of receipt of DEMAND 13.06.02                    |   | EMAND 13.06.02  |           |
| Box No. I IDENTIFICATION OF THE INTERNATIONAL APPLICATION  |   | Applicant's or agent's file reference<br>FP.590 |   |           |
| International application No.<br>PCT/JP02/00533  | International filing date (day/month/year) 25.01.02   |   | (Earliest) Priority date (day/month/year<br>26.01.01  |           |
|  | IMITATION, METHOD OF EXTRACT                          | ING TIMING POINT AMPLITUDE                      | NIGNAL FOR USE WITH INFORMATION READING APPAI<br>AND METHOD OF PROCESSING SIGNAL THEREOF, R<br>ARATUS THEREOF |           |
| Box No. II APPLICANT(S)  |   |   |   |           |
| Name and address: (Family name followed by given name; for a legal entity, full official designation.  The address must include postal code and name of country.)  FUJITSU LIMITED |   | Telephone No.:                                  |   |           |
| 1−1, Kamikodanaka 4<br>Kawasaki−shi, Kanag   | aaka 4−chome, Nakahara−ku,<br>Kanagawa 211−8588 Japan |   | Facsimile No.:  |           |
|  |   | Teleprinter No.:                                |   |           |
| State (that is, country) of nationality:   | Japan   | State (that is, country) of residence: Japan    |   |           |
| Name and address: (Family name followed by g   | given name; for a legal entity, f                     | ill official designation. The                   | e address must include postal code and name of c  | :ountry.) |
| IWAGUCHI, Isao<br>c∕o FUJITSU LIMITED, 1−1, Kamikodanaka 4−chome,<br>Nakahara−ku, Kawasaki−shi, Kanagawa 211−8588 Japan  |   |   |   |           |
| State (that is, country) of nationality:   | Japan   | State (that is, country) of residence:  Japan   |   |           |
| Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)                   |   |   |   |           |
| KAKU, Takashi<br>c/o FUJITSU LIMITED, 1−1, Kamikodanaka 4−chome,<br>Nakahara−ku, Kawasaki−shi, Kanagawa 211−8588 Japan   |   |   |   |           |
| State (that is, country) of nationality:   | Japan   | State (that is, country                         | yofresidence: Japan   |           |
| Further applicants are indicated n a continuation sheet.   |   |   |   |           |

# **PCT**

### FEE CALCULATION SHEET

## Annex to the Demand for international preliminary examination

|   | <del></del>  | For International Preliminary Examining Authority use only |  |
|---|--|--|--|
| International application No.   | PCT/JP02/00533   |  |  |
| Applicant's or agent's file reference   | 's<br>FP 590   | Date stamp of the IPEA                                     |  |
| Applicant   | FP 390   | <del></del>  |  |
| ,   | FUJITSU LIMITED  |  |  |
| Calculation of pres   | scribed fees   |  |  |
| Preliminary exa   | amination fee  | ¥28,000 P  |  |
| entitled to a re<br>Where the appli<br>titled, the amou   | (Applicants from certain States are eduction of 75% of the handling fee. licant is (or all applicants are) so enunt to be entered at H is 25% of the | ¥17,100 H  |  |
| Total of prescril     Add the amount     and enter total i  | its entered at P and H   | ¥45,100<br>TOTAL   |  |
| Mode of Payment   |  |  |  |
| authorization account with  | on to charge deposit<br>h the IPEA (see below) cash  |  |  |
| cheque  | revenue  | e stamps   |  |
| postal mone   | ey order coupon  | s  |  |
| bank draft  | other (s   | pecify):   |  |
| Deposit Account Authorization (this mode of payment may not be available at all IPEAs)  The IPEA/ is hereby authorized to charge the total fees indicated above to my deposit account.  |  |  |  |
| (this check-box may be marked only if the conditions for deposit accounts of the IPEA so permit) is hereby authorized to charge any deficiency or credit any overpayment in the total fees indicated above to my deposit account. |  |  |  |
| Dep sit Account No  | umber Date (day/month/year)  | Signature  |  |

### (19) 世界知的所有権機関 国際事務局



# 

### (43) 国際公開日 2002 年8 月1 日 (01.08.2002)

#### **PCT**

## (10) 国際公開番号 WO 02/059825 A1

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(21) 国際出願番号:

PCT/JP02/00533

(22) 国際出願日:

2002年1月25日(25.01.2002)

(25) 国際出願の言語:

日本語

(26) 国際公開の言語:

日本語

(30) 優先権データ:

特願2001-019271

2001年1月26日(26.01.2001) J

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- (74) 代理人: 真田有 (SANADA,Tamotsu); 〒180-0004 東京都 武蔵野市 吉祥寺本町1丁目10番31号 吉祥寺広瀬ビル5階 Tokyo (JP).
- (81) 指定国 (国内): CN, JP, KR, US.
- (84) 指定国 (広域): ヨーロッパ特許 (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR).

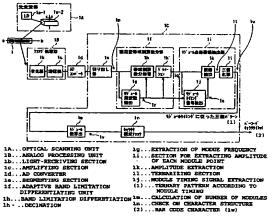
添付公開書類:

— 国際調査報告書

/続葉有/

(54) Title: INFORMATION READING METHOD AND DEVICE, SIGNAL CAPTURING METHOD FOR INFORMATION READING DEVICE, BAND LIMITING METHOD THEREFOR, TIMING POINT AMPLITUDE EXTRACTING METHOD THEREFOR, AND SIGNAL PROCESSING METHOD THEREFOR, READ SIGNAL PROCESSING UNIT, AND READ SIGNAL PROCESSING METHOD AND DEVICE

(54) 発明の名称: 情報読取の方法および装置,情報読取装置の信号取込方法,帯域制限処理方法,タイミング点振幅抽出方法および信号処理方法,読取信号処理ユニットならびに読取信号の処理方法および処理装置



(57) Abstract: An information reading method in which the S/N and read resolution of a read signal are improved while reducing the hardware scale and price, the read accuracy is improved even if the read depth is increased and even if the read surface is uneven or clouded. A signal including binary information having a predetermined information length and arranged

02/059825 A1

2文字コード及び他の略語については、定期発行される 各PCTガゼットの巻頭に掲載されている「コードと略語

のガイダンスノート」を参照。

linearly is captured from a medium (1), information on the basic unit length of the information length of the binary information is extracted from the captured signal, the information length ratio of the binary information is determined from the captured signal on the basis of the extracted basic unit length information.

### (57) 要約:

ハードウェア規模ないし価格を抑えつつ読み取り信号のS/Nとともに読み取り分解能を向上させ、読取深度が拡大した場合や読取面に凹凸やかすみが有った場合の読取精度を向上できるようにした情報読取方法であって、媒体1から、所定の情報長を有して1次元配置された二値化情報を含む信号を取り込み、前記取込信号から前記二値化情報の情報長における基本単位長に関する情報を抽出し、前記抽出された基本単位長情報に基づいて、前記の取込信号から二値化情報の情報長の比を読み取るように構成する。

| Continuation of Box No. II APPLICANT(S)   |   |  |  |
|---|---|--|--|
| If none of the following sub-boxes is used, this sheet should not be included in the demand.  |   |  |  |
| Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)  |   |  |  |
| MURATA, Hiroyasu<br>c∕o FUJITSU LIMITED, 1−1, Kamikoda<br>Nakahara−ku, Kawasaki−shi, Kanagawa   | naka 4-chome,<br>211-8588 Japan   |  |  |
| State (that is, country) of nationality:  Japan   | State (that is, country) of residence:<br>Japan                                       |  |  |
| Name and address: (Family name followed by given name; for a legal entity, j  | full official designation. The address must include postal code and name of country.) |  |  |
| YAMAZAKI, Kozo<br>c∕o FUJITSU LIMITED, 1−1, Kamikod<br>Nakahara−ku, Kawasaki−shi, Kanagawa  | anaka 4-chome,<br>a 211-8588 Japan  |  |  |
| State (that is, country) of nationality:  | State (that is, country) of residence:  |  |  |
| Japan   | Japan   |  |  |
| Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)  OHKAWA, Masanori c/o FUJITSU LIMITED, 1-1, Kamikodanaka 4-chome, Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588 Japan |   |  |  |
| State (that is, country) of nationality:  Japan   | State (that is, country) of residence:<br>Japan                                       |  |  |
| Name and address: (Family name followed by given name; for a legal entity,  | full official designation. The address must include postal code and name of country.) |  |  |
| WATANABE, Mitsuo<br>c∕o FUJITSU LIMITED, 1−1, Kamikodanaka 4−chome,<br>Nakahara−ku, Kawasaki−shi, Kanagawa 211−8588 Japan   |   |  |  |
| State (that is, country) of natinality: Japan   | State (that is, country) of residence: Japan  |  |  |
| V Further applicants are indicated on another continuation she  | et.   |  |  |

Sheet No. .3.

International application No. PCT/JP02/00533

|  |   | 1 017 01 027 00000   |  |
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| Continuati n of Box N . II APPLICANT(S)  |   |  |  |
| If none of the following sub-boxes is used, this sheet should not be included in the demand.   |   |  |  |
| Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.) |   |  |  |
| MIYAZAWA, Hideo<br>c/o FUJITSU LIMITED, 1-1, Kamikodanaka 4-chome,<br>Nakahara-ku, Kawasaki-shi, Kanagawa 211-8588 Japan   |   |  |  |
|  |   |  |  |
| State (that is, country) of national   |   | State (that is, country) of residence:   |  |
|  | <u>Japan</u>                                  | Japan  |  |
| Name and address: (Family name)  | followed by given name; for a legal entity, j | full official designation. The address must include postal code and name of country.)      |  |
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| State (that is, country) of national   | lity:   | State (that is, country) of residence:   |  |
| Nome and address: (F-ib  | full made having a page for a local mation of | ull official designation. The address must include postal code and name of country.)       |  |
| Ivanic and address. (Family range  | jouoweavy given nume, jor a tegat entity, j   | an Opena aesig anoi: 112 ann eis mai suimae pouns cone a nime a gcoma y, j                 |  |
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| State (that is, country) of national   | lity:   | State (that is, country) of residence:   |  |
| Name and address: (Family name   | followed by given name; for a legal entity, j | l<br>full official designation. The address must include postal code and name of country.) |  |
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| State (that is, country) of national   | lity:   | State (that is, country) of residence:   |  |
| (  |   |  |  |
| Further applicants are ind   | licated on another continuation she           | et.  |  |

|   | Sheet No4.  | PCT/JP02/00533   |  |  |
|---|---|--|--|--|
| Box No. III AGENT OR COMMON   | REPRESENTATIVE; OR ADDRESS FOR CO   | RRESPONDENCE   |  |  |
| The following person is  agen   | t common representative   |  |  |  |
| and $\overline{V}$ has been appointed earlier and   | represents the applicant(s) also for international pre  | eliminary examination.                                     |  |  |
| is hereby appointed and any ea  | arlier appointment of (an) agent(s)/common represer   | ntative is hereby revoked.                                 |  |  |
| is hereby appointed, specifical the agent(s)/common represen  | ly for the procedure before the International Prelimitative appointed earlier.                          | nary Examining Authority, in additi n t                    |  |  |
| Name and address: (Family name followed The address must include  | d by given name; for a legal entity, full official designation.<br>de postal code and name of country.) | Telephone No.:   |  |  |
|   |   | 0422-21-4222   |  |  |
| SANADA Tamotsu  | I II 0007)  | Facsimile No.:   |  |  |
| Patent Attorney (Reg  |   | 0400 04 0050   |  |  |
| Kichijoji-Hirose Bldg.  |   | 0422-21-3359   |  |  |
| Kichijoji−honcho 1−ch<br>Musashino−shi, Tokyo   |   | Teleprinter No.:   |  |  |
| Address for correspondence  | Made this about house   |  |  |  |
| space above is used instead to  | : Mark this check-box where no agent or common re<br>indicate a special address to which correspondence | presentative is/has been appointed and the should be sent. |  |  |
| Box No. IV BASIS FOR INTERNAT   | TIONAL PRELIMINARY EXAMINATION  |  |  |  |
| Statement concerning amendments:*   |   |  |  |  |
| 1. The applicant wishes the international   | al preliminary examination to start on the basis of:  |  |  |  |
| the international application as  | s originally filed  |  |  |  |
| the description as original   | ly filed  |  |  |  |
|   | d under Article 34  |  |  |  |
| the claims as original  | ly filed  |  |  |  |
| as amende   | as amended under Article 19 (together with any accompanying statement)                                  |  |  |  |
| as amended  | d under Article 34  |  |  |  |
| the drawings as original  | <del>-</del> ,  |  |  |  |
| as amended  | d under Article 34  |  |  |  |
|   | ndment to the claims under Article 19 to be consider  | •  |  |  |
| 3. The applicant wishes the start of the international preliminary examination to be postponed until the expiration of 20 m nths from the priority date unless the International Preliminary Examining Authority receives a copy of any amendments made under Article 19 or a notice from the applicant that he does not wish to make such amendments (Rule 69.1(d)). (This checkbox may be marked only where the time limit under Article 19 has not yet expired.)       |   |  |  |  |
| Where no check-box is marked, international preliminary examination will start on the basis of the international application as originally filed or, where a copy of amendments to the claims under Article 19 and/or amendments of the international application under Article 34 are received by the International Preliminary Examining Authority before it has begun to draw up a written opinion or the international preliminary examination report, as so amended. |   |  |  |  |
| Language for the purposes of internati  | onal preliminary examination: Japanese  |  |  |  |
| which is the language in which the international application was filed.   |   |  |  |  |
| which is the language of a translation furnished for the purposes of international search.  |   |  |  |  |
|   | lication of the international application.  |  |  |  |
| which is the language of the translation (to be) furnished for the purposes of international preliminary examination.   |   |  |  |  |
| Box N . V ELECTION OF STATES  |   |  |  |  |
| The applicant hereby elects all eligible States (that is, all States which have been designated and which are bound by Chapter II of the PCT)   |   |  |  |  |
| excluding the following States which  | the applicant wishes not to elect:  |  |  |  |
|   |   |  |  |  |

Sheet No. .5.

International application No. PCT/JP02/00533

| B x No. VI CHECK LIST  |                  |  |                        |       |
|--|------------------|--|------------------------|-------|
| The demand is accompanied by the following elements, in the language referred to in Box No. IV, for the purposes of international preliminary examination:  For International Preliminary Examining Authority use only received not received |                  |  |                        |       |
| 1. translation of international application  | :                | sheets   |                        |       |
| 2. amendments under Article 34   | :                | sheets   |                        |       |
| copy (or, where required, translation) of amendments under Article 19  | :                | sheets   |                        |       |
| copy (or, where required, translation) of statement under Article 19   | :                | sheets   |                        |       |
| 5. letter  | :                | sheets   |                        |       |
| 6. other (specify)   | :                | sheets   |                        |       |
| The demand is also accompanied by the item(s) ma   | rked below:      |  |                        |       |
| 1.  fee calculation sheet  |                  | 4. statement e   | xplaining lack of sign | ature |
| 2. separate signed power of attorney   |                  | 5. nucleotide and or amino acid sequence listing in computer readable form |                        |       |
| 3. copy of general power of attorney; reference number, if any:  |                  | 6. other (spec   |                        |       |
| Box No. VII SIGNATURE OF APPLICANT, A  | GENT OR C        | OMMON REPRESE  | NTATIVE                |       |
| Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the demand).  SANADA Tamotsu (Sealed)   |                  |  |                        |       |
| For Internation  | nal Preliminary  | Examining Authority  | use only               |       |
| Date of actual receipt of DEMAND:  |                  |  |                        |       |
| Adjusted date of receipt of demand due     to CORRECTIONS under Rule 60.1(b):  |                  |  |                        |       |
| 3. The date of receipt of the demand is AFTER the expiration of 19 months from the priority date and item 4 or 5, below, does not apply.  The applicant has been informed accordingly.   |                  |  |                        |       |
| 4. The date of receipt of the demand is WITHIN the period of 19 months from the priority date as extended by virtue of Rule 80.5.  |                  |  |                        |       |
| 5. Alth ugh the date of receipt of the demand is after the expiration of 19 months from the priority date, the delay in arrival is EXCUSED pursuant to Rule 82.  |                  |  |                        |       |
| Demand received from IPEA on:  | For Internationa | al Bureau use only 🔔   |                        |       |